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Thomas S. Burack, Chairman  
Site Evaluation Committee  
New Hampshire Department of Environmental Services  
29 Hazen Drive, Box 95  
Concord, NH 03302-0095

To: Chairman Site Evaluation Committee  
Date: 1 February 2009  
Re: Application of Granite Reliable Power, LLC, Docket No. 2008-04

Dear Chairman Burack:

As a resident of Coos County, I would like to express my personal opinion, and as an Environmental Biologist, my scientific opinion about the application submitted by Granite Reliable Power to construct an industrial wind farm in the Greater Phillips Brook area of Coos County.

Let me begin by stating that I am not against wind-generated power as part of our national energy strategy. Where turbans are sited appropriately, and projects are sized and designed as to have minimal impacts on local human and non-human communities, wind may become an important, albeit intermittent augmentation of our national energy base. By "appropriately" I mean locations where development would not conflict with; people's homes and property rights, recreational opportunities, traditional uses, research and educational potentials, spiritual needs, and/or their general quality of life, and where development will not destroy habitats, challenge species, degrade ecological settings such as critical and/or fragile wildlife habitats or unique communities.

Decades of work by many New England and national conservation, sporting, ecological, biological, and recreational groups has blossomed into a region-wide and nearly contiguous core, buffer, and corridor complex that could not have dreamed of in the mid-1980s. As any worthy and honest biologist will attest, this has given hope to many species and communities of this region. The Bayroot and Phillips Brook tracts seemed, from the outside at least, close to becoming cosseted and are widely viewed as a model for 'multiple use' and 'preservation'. Once touted as a region where anthropocentric uses could blend with bio-centric none-consumptive uses, these lands have been badly abused. The Best Management Practices (BMPs) of New Hampshire's forest products industry were tossed on these sites. Much of the lands above 2700 ft were trashed. The Society for the Protection of NH's Forests (SPNHF) and others were making progress toward giving the land a chance through the Forest Legacy program. Now these properties are soon to become a 'young virgin forest' to be managed sustainably for multiple values, or trashed to generate electricity for the megalopolis of Bos-Wash.

Though a functioning North Country ecological zone was too much to hope for, I was still inconsolable when I found that wind-turbine farms are being designed, and if this committee bequests this land to developers, will soon to be built in very heart of this project. This rents the New England habitat, fragmenting the Core. The millions spent on; The Androscoggin Valley, The Conti Wildlife Refuge, Nash Stream, Bunnell Mountain, Washburn's Forest, Pittsburg, NH, Nulhegan Basin, Vt, Rangeley Lakes Region and LURK of Maine all are devalued by the loss of this very significant chain of Sky Islands. This is the very core of the corridor, core, buffer system as designed and nearly implemented by Conservation Biologists and like-minded scientists. These turbines would be just 10 miles from the Connecticut River and 10 miles from Umbagog

Wildlife Refuge. These Refuges (and the defacto refugia provided by the traditional, managers) are home to many individuals and species that depend on these sky island refuges for their existence. Creatures such as, but not limited to; black bear, northern bog lemming, local as well as transient raptures, and neo-tropical birds, to name a few types, are found in these threatened habitats and some are quite rare. Some of our rare bats have habitat available to them in these sky islands. Canada Jay, Spruce Grouse, Hoary Redpoll, crossbills, Northern Goshawk, Boreal Chickadee, Bicknell's Thrush, Cape May Warbler, are apt to reside or pass through these high elevation habitats. If one ever hoped to find a rare visitor as a Great Gray Owl, or Northern Hawk Owl, this could be such a place. A rare type of organism will be the least likely to be found in a limited survey. I question whether the resident mosses, ferns, fungi, and lichens have been properly inventoried and had their population status evaluated. Beyond this, I question whether plants even more commonly focused on such as orchids, hardwood and softwood trees have been inventoried and properly documented.

Sky islands in this ecotone where unique communities have developed have become more isolated as the local northern boreal climate denigrates toward a southern type. Just as New Hampshire is unique in having Fish Crows and Raven, White tail and Moose, Southern and Northern Bog Lemming, these boreal sky islands have ecological communities who's 11,000-year-old structure is more endemic then its occupants. As these islands become more isolated and reduced in size because of climatic shift, they become more unique, more stressed, and more valuable. The old saw of 400feet in elevation equating to 100miles of latitude applies in both directions. As planting zone 5 slips north 100miles, so too does the mountain-top boreal forest-habitat become more pinched into the ridge tops.

This project's location will fragment the midriff of the Northern Forest. As you know, a 50% reduction in habitat size equates to a 10% reduction of biological diversity—and that's without considering the turbines themselves. Though not my issue, I've read that New Hampshire estimates the income from the open ridgelines at \$1.1 billion. I don't believe we should allow this crippling blow.

This project is an ill wind that blows no good for us. As a science oriented person and an environmental activist, I'm all for reducing carbon-based fuels. I favor many alternatives, but as with any business, it's location, location, location. The scheme to convert our North Country into a power generation center for Boston and New York is criminal. This disregards our laws, regulations, and mores. Though the wind turbines will have 'only a 203-acre footprint' within the 60,000-acre Bayroot Parcel and 24,000-acre Phillips Brook Tract (of which nearly half of this 84,000-acre tract is above 2700 feet), the rent in the landscape will be like having a three-piece suit with its zipper down. The impact is not proportionate to the footprint.

Wind energy is being sold "green" and "renewable". There is little non-biased data to support the "greenness" of wind turban farms. As with so many other endeavors, size matters. I am asking this board to make a distinction between this size project, this huge mega-project and a truly "green" single, tiny, wind-mill of an individual. We no longer confuse family farming and agribusiness, sport fishing and gillnetting-ocean-miners. Our language and our recommendations should recognize the significance of scale. Secondly, though "renewable" has become a baiting and misused term of the propagandist, wind power should not be referred to as "renewable". It would be more apropos to call it sustainable, or more honestly; intermittently sustainable.

To refer to wind power development on these sites as green, is to except a Faustian deal with the devil. To protect the high elevation sky islands (such as defined and clarified by ongoing studies of Camel's Hump, Vt.) from the tortures of acid rain and global warming by a phony alternative that in actuality destroys them is truly inscrutable. To protect the oceans from agricultural runoff and over fishing, would this site committee and the other proponents of this project collaborate to defeat the forces of nature and create a mechanical heaven on earth, drain the seabed and use it for farming?

This project's impact far outweighs its benefits. The 33 turbines with a peak (idealistic) capacity of 99 megawatts would at best generate enough electricity to allow New Englanders and New Yorkers to skip changing a few light bulbs, and could displace enough generation capacity from other sources to reduce NH's CO2 emissions by a little less than 2%--max. And this includes displacing our job-securing biomass potential. The mega-development (mega- in the context of Coos County) with its huge power lines, and centralized distribution model remain questionable.

Many have, and this committee should, question the merit of increasing our reliance on large, centralized distribution models. From Home Land Security to Earth Island Institute, forward thinking people including most of the scientific community (and not just a majority of conservationists, conservation biologists, ecologists, and biologists, but also physicists, systems analysts, etcetera) understand that systems of the scale of New England's power grid are not desirable. These are exemplars of the rule of diminishing returns with ever increasing size. Their size also begs the question of maintenance and reliability in the face of our local climatic events such as snow, ice, and windstorms. In this record low cycle of solar activity it is too easy to overlook the question of solar flux and what the impact could be on the expanded grid when the upcoming and overdue solar influx begins. How much more repair, cost, and risk will this project generate.

Beyond the above concerns that should be satisfactorily addressed before any permits are given, the following bulleted questions should be addressed;

- Does New England and New York, the customers of this project, actually need more electricity? What is this region's energy budget?

- Without; Quebec Hydro, and/or Bow Steam Plant, and/or Vermont Yankee, how much of an energy shortfall does New England have, and what part of this should be on our sacrifice?

- How much of this demand is frivolous?

- The ski industry was very vocal in favor of Quebec Hydro stating in public that their expansion plans superseded concerns about Indians and Caribou. Ben & Jerri's Ice Cream was in favor of it to keep the price of their ice cream down. Flooding an area the size of France, drowning thousands of Caribou and displacing many First-Nation People was not too large a price to pay for cheaper ice and snowmaking. Is this Site Evaluation Committee and its members of the same mind set? Are you cut of the same cloth?

- How much energy could come from conservation measures that reduce demand (and waste)?

- How many alternative projects are not being considered because of our society's myopic commitment to wind?

- Why do projects sit idle, such as farm waste bio-digestion? Cow-power of Vermont could convert the Forb's Farm, the biggest farm in New Hampshire or Vermont into a major generation facility- and in doing so help cleanup the Connecticut River's Conti Wildlife Refuge. Why not this instead?

- The same could be said of the trash pile in Bethlehem, NH. A mountain of trash that can be seen from space rots methane greenhouse gas into the atmosphere rather than being used in bio-digestion. Why is this not being considered as an alternative to this project? Shouldn't this committee be held to the standard of on site as well as off site impacts? If so, would this include evaluation of alternatives?

- Why does the roof of White Mountains Regional High School that was designed for solar collection remain inactive?

Though the Site Evaluation Committee (SEC) (whose decision to allow this project will supersede all laws, regulations, local ordinances, etc.) visited a ridge that is not related to the sky island systems in jeopardy, an 8 October 2008 Democrat article stated that in an SEC visit of proposed turbine sites they "were able to see that there is little that distinguishes one ridge line from another where trees are routinely harvested in long-planned cuts. There are few landmarks in these woods, which are nearly out of sight to most travel(ers)..."

This is reminiscent of what Ronald Reagan said while visiting a controversial power generation site on the Eel River, "You don't have to look at thousands of trees to know what one looks like.", which became translated to, 'If you've seen one redwood, you've seen them all.' These statements are suggestive of cross-ethnic identification in that it is human nature to not see the subtle unique characteristics in people, objects, and systems with which we are not intimate. Combine this with a personal quote from one who became a department head in New Hampshire Fish and Game, "The concept of Native is a Victorian idea, like virginity, and has no place in management.", and this clearly exposes a deep-seated and systemic lack of a land-based ethic within these people and perhaps within the SEC. The value of this land is not just the economic value of its logs and pulp, but that harvesting through sustainable management is the compromise that has kept these lands intact as refugia for man and beast for generations. To not understand this does not say much for the viewpoint stated by the Site Evaluation Committee.

Granite Reliable Power (subsidiary of Conn.-based Noble Environmental Power (once?) financed by JP Morgan Partners) implied that they would set aside a '660-acre parcel to be conserved as mitigation for the destruction of wetlands, and a 460 acre buffer to mitigate disturbances to high elevation species, of which 350 acres are above 2700 feet. Mitigation is a buzz-word that always begs transparency. In this case Granite Power, with the sanction of the SEC, would poke-out one eye and become above reproach because they left the second eye as mitigation. How does not destroying some ridge-top habitat and wetland habitat pardon one of the trashing of other fragile systems? Having once not sped does not mitigate speeding, and habitat destruction is not exonerated by not completely destroying all of the habitats. Another mitigation, their placing of underground transition lines, seems disingenuous in light of the absence of soil and the exposed bedrock of these ridges.

The benefits of electricity from wind have been greatly overstated and true environmental and economic costs have been greatly understated. This is a case where the public, media and government officials have been badly misled by the wind industry, its lobbyists and other wind energy advocates. As a result current federal, state, and now, county policies promoting electricity from wind are flawed and detrimental to consumers, taxpayers and the environment and, therefore, not in the public interest. Opposition to "wind farms" is not unique to New Hampshire. As the truths about wind energy have emerged where "wind farms" have been built or proposed in the US and other countries, dozens of citizen-led opposition groups have emerged. There are now more than 200 such groups in the US (in at least a dozen states, including ME, NH, VT and MA) and other countries (including the UK, Germany, Denmark, Spain, France, Italy, Australia, New Zealand).

If you will look closely at the facts, you will discover that:

1. Tax avoidance – not environmental and energy benefits – has become the primary motivation for building “wind farms.”
2. Huge windmills – often taller than the US Capitol -- produce very little electricity.
3. Electricity from wind turbines has less real value than electricity from reliable generating units, and they detract from electric system reliability.
4. The true cost of electricity from wind energy is much higher than wind advocates admit.
5. Claims of environmental benefits of wind energy are exaggerated.
6. “Wind farms” have significant adverse environmental, scenic and property value impacts.
7. “Wind farms” produce few local economic benefits, which are overwhelmed by the higher cost, imposed on electric customers through their monthly bills.
8. Various other subsidies shift large amounts of cost from “wind farm” owners to ordinary taxpayers and electric customers.
9. The big “winners” are “wind farm” owners and a few landowners who lease their land.
10. The wind industry’s claim that they deserve tax breaks and other subsidies because other energy sources have received even larger government-imposed benefits is false.
11. County and State governments and its politicians have more to gain from this project than the people of Coos County.

If the above bulleted items (1-11) are not factual, then what are the facts as this committee understands them, and on what defensible and cited grounds do you come to alternative conclusions?

I recognize that the people of New England are concerned about the environmental impact of existing generating plants in New England, and concerned that there may not be enough generating capacity in the future as electricity demand increases. These are valid concerns. However, it must be recognized that wind turbines produce electricity only when the wind is blowing in the right speed range. Their output is intermittent, highly volatile, and largely unpredictable. They cannot be counted on to produce electricity when customers need it. Therefore, reliable (“dispatchable”) generating capacity must always be available to “back up” unreliable wind energy. New capacity will have to be added to electric grids as electricity demand increases whether or not wind turbines are built. As a practical matter, this means that electric customers would end up paying twice; once for the expensive electricity from wind and again to provide reliable generating capacity.

As you and your staff study the wind energy issue, please recognize that a lot of false and misleading information has been produced and distributed during the past decade by the wind industry, its lobbyists, the US Department of Energy’s Office of Energy Efficiency and Renewable Energy (DOE-EERE), DOE’s National Renewable Energy “Laboratory” (NREL), and a variety of educational institutions and “nonprofit” wind advocacy groups that receive tax dollars flowing through DOE-EERE and NREL. It is important that you, your colleagues and your staff learn the facts about wind energy. In the public interest, you should begin to question severely the information you are given by wind industry lobbyists and other groups named above that have such a strong vested interest in continuing and expanding faulty federal and state policies that promote wind energy.

The wind farm erected in Mars Hill, ME that has caused nearby homeowners great distress and anguish. The construction of such a large facility within earshot of pre-existing homes was an avoidable mistake. However, the desire to "go green", the lure of what turned out to be overstated tax revenues for the town, and an unrealistically rosy scenario painted by the developer resulted in a decision that ended badly for those unfortunate citizens. That decision changed their lives permanently and not for the better. Does this committee recognize the compromises made here out way the gain? The citizens have had their property rights, as well as their personal rights violated. This project would impact a much larger section of land either side of the development destroying the traditional value of these lands.

In New Hampshire, perhaps because of our strong Libertarian traditions, we have regulations such as Section 644:1(a):

- (a) Making loud or unreasonable noises in a public place, or making loud or unreasonable noises in a private place which can be heard in a public place or other private places, which noises would disturb a person of average sensibilities;

which protect us from activities that denigrate our home. How does this committee find this project and its externalities, not to be a violation of this regulation?

This tract was owned for more than 100 years by the International Paper Company and though traditionally Phillips Brook receives heavy public recreational use it is excellent habitat for a wide range of game and non-game species, including moose, bear, bobcat, and white-tail deer. The brook itself provides habitat for native brook trout and other sport fish. It is for these attributes that New Hampshire, and Coos County found it prudent to eliminate property taxes for these large landowners. If we have so little guarantee of appropriate management which will guarantee the quid-pro-quo of open semi-wild forests, then why shouldn't these lands be taxed at the same value as my forested, un-posted and quite land?

The property shares a nearly 10 mile long boundary with the 40,000 acre Nash Stream Forest (owned by State of N.H. and under CE supervised by the U.S. Forest Service). Nash Stream in turn links to the 18,000-acre Bunnell tracts protected by a Forest Legacy CE. Nash Stream also abuts the 2,000-acre Kauffmann Forest owned by the Forest Society. Combined, these parcels and Phillips Brook Tract comprise a nearly 84,000-acre contiguous block of forest land. This is an important opportunity to permanently conserve one of the largest remaining working forest tracts in northern New Hampshire and the nationally significant Northern Forest Region.

Local as well as National individuals and groups are working toward a management plan that all hope will help lead to protection of critical lands in the Northern Forest region and these sky islands a very important to this mission.

As (perhaps dated in view of the last elections) evidence of the alternative, undeveloped value of this region, A 'Congressional sign-on letter' spearheaded by U.S. Rep. Charles Bass (R-NH) and U.S. Rep. Thomas Allen (D-ME) supporting increased funding for important land conservation programs was signed by a record 122 members of the U.S. House of Representatives. The March 16, 07 letter requesting \$80 million for the Forest Legacy Program, \$100 million for the Land and Water Conservation Fund (LWCF) state grant program, and \$220 million for the LWCF federal program in FY 2007 was sent to the House Subcommittee on Interior Appropriations.

In addition to U.S. Congressmen Bass and Allen, representatives from the Northern Forest region signing onto the letter included Rep. Jeb Bradley (R-NH), Rep. Michael Michaud (D-ME), and Rep. Bernard Sanders (I-VT).

Among the bipartisan group signing the letter were representatives from a wide array of states, including Maine, New Hampshire, Vermont, New York, Pennsylvania, New Jersey, South Carolina, Alabama, Minnesota, Wisconsin, California, and Arizona.

His land also has many anthropocentric uses. As an example, Bill Altenburg of Conway pointed the way toward a new vision of the North Country by erecting yurts in the backcountry to attract XC-skiers, snowshoers, sled dog mushers and summer recreation his model worked for five years he had 5,000 visitors to the original Phillips Brook complex one year.

Any development denigrates or destroys the ecological and the economic value of these ridge tops. Here is a short and incomplete list of a few sample projects that highlight the value of this undeveloped land:

- Funding for the Forest Legacy Program and Land and Water Conservation Fund have helped conserve 2.7 million acres of the Northern Forest since 1990. (Jad Daley, Campaign Director for the Northern Forest Alliance).
- SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS; a two-year campaign to secure \$3.5 million in funds to acquire a conservation easement (CE) on Phillips Brook
- I must agree, and ask how this committee can disagree with our state biologists who state; "As proposed the project will have a severe and unmitigated impact on the natural environment." Their testimony also states that "45% of the potential habitat for this species (Bicknell's thrush) in the world is found in New Hampshire."

The Stantec testimony addressed the Bicknell's thrush issue in this way: "Indirect impacts to breeding birds are expected to vary based on the habitat needs of individual species; those associated with forest interior habitats will be affected more, and those associated with edge or disturbed habitats will be less affected. To date little is known about habitat impacts to breeding birds from the development of wind projects because very few post construction studies have been conducted to address these impacts. We anticipate some impacts to ridgeline breeding habitats due to the limited amount of disturbance that have occurred in the past. However, the numbers of species that specifically utilize the summit habitats were documented to be low." And here I must reiterate, there are unique species, and species of concern that have habitats in these sites. Properly certified personnel and agencies have not adequately surveyed these sites. And the uniqueness of these ecological communities makes them critically significant. These sites are more valued and valuable than the energy potential of wind generation there. The fragmentation caused by this proposed development will damage the ecological integrity for a much larger region.

Wind power is considered a "green" technology because, unlike fossil fuel power plants, it does not produce harmful emissions, such as carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, and particulate matter, which can pose human health and environmental risks such as acid rain. However, it is now recognized that wind power facilities can adversely affect the environment in other ways, specifically in impacting wildlife such as birds and bats. Wind power facilities located in migratory pathways or important habitats may harm the wildlife living or passing through the area by killing or injuring them or by disrupting feeding or breeding behaviors.

Here is a very limited set of examples of reports where wind turbans have affected wildlife. This committee should and I'm sure will expand upon this list before making a resolution. (I would like to note that some of these indicate violations of Federal Laws. I would hope that being informed of these as such will help you avoid litigation.)

**Eagles:**

Over the past 6 years, FWS has referred about 50 instances of golden eagles killed by 30 different companies in Altamont Pass either to the Interior Solicitor's office for civil prosecution or to the Department of Justice for criminal prosecution.

[Rememeber that this project is between two riparian Wildlife Refuges with nesting Bald Eagles.]

**Raptors.**

The Center for Biological Diversity filed a lawsuit against the wind power companies in Altamont Pass to seek restitution for the killing of raptors. A recent study shows that over 1,000 raptors are killed by wind power facilities in northern California each year.

A 2001 analysis of studies estimated that wind turbines in the United States cause roughly 33,000 avian deaths per year.

(I recognize that studies have been done and evidence has been collected debunking this threat to birds, but I also know that The Center for Biological Diversity, The Society of Conservation Biologist and others have the where-with-all to rebut this weak testimonies.)

**Bats:**

A recent study estimated that over 2,000 bats were killed during a 1-year period at a wind power facility in the mountains of eastern West Virginia. Another study found 38 bats per turbine, per a 6-week study period, in the Appalachian Mountains.

This committee should be able to demonstrate that no [bat or other] species of concern will be destroyed (note the term destroyed includes their habitat and potential habitat).

**Law:**

The Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and the Endangered Species Act—are a few of the federal laws most relevant to protecting wildlife from wind power facilities, and these laws generally forbid harm to various species of wildlife. FWS is the federal agency that has primary responsibility for implementing and enforcing these three laws. Although none of these specific

laws expressly require wind power developers and operators to take specific steps to ensure that wildlife will not be harmed during either the construction or operation of their facilities, wind power developers or operators are liable for any harm to protected species that may occur. Is this committee specifically exempted for these laws? And if so, why would this committee need such protection unless you are intentionally disregarding information that would have allowed you to avoid harming or destroying species of concern and/or their habitat.

Are you intentionally disregarding information that would have allowed you to avoid harming or destroying species of concern and/or their habitats?

The Fish & Game biologists' positions on this issue are clear and unambiguous. The Stantec testimony is quite the opposite. In addition, the testimonies of three scientists submitted to your committee on Jan. 5, 2009 by the Counsel for the Public characterize the Stantec study as incomplete, its assessment of environmental impact as understated, its proposed mitigation plans inadequate, while clearly supporting the position of our state biologists.



Dartmouth's Dr. Richard Birnie extensive library of Landsat satellite data, the remote sensing data spanning 18 years (used to establish a trend line for harvest history in the North Country) demonstrates the isolation, uniqueness, and stability of these ridges.

Some evidence has already been exposed concerning this committee, the former landowner, the current land owner, and the North Country's politicians. The state and local press have also written about unsustainable harvesting on this property and the Coos County Planning Board has been reviewing Dillon's forestry practices. Dillon has also banned New Hampshire Fish and Game biologists from entering the property unless accompanied by Dillon's employees. Oddly enough, Dillon's forester in Success is also the Coos County Fish and Game Commissioner for NH Fish & Game. Dillon has also sold a nearby Jericho forest tract of several thousand acres in Berlin to the state of New Hampshire for a state park to feature ATV trails. The logging on that tract has been described as similar to the timber baron harvesting of the White Mountains Region at the turn of the century and it is estimated by the forester for the new park that timber there will not recover for another forty years. This type of stewardship leads to draconian liquidation schemes such as this wind project. Are there any demonstrable measures of a sustainable land management plan, or a sustainable land ethic?

In closing, I respectfully request that the SEC members and others in our government resist the urge to rush into actions that will forever change the character of Coos County and its ecological setting.

I hope that you'll become informed about the reality of wind-turbine farms. Wind power is one of the alternatives America needs. And there are thousands of viable locations. The Sky Islands of New Hampshire are not among these locations.

Thank you for the opportunity to comment and for your consideration.

Sincerely,



Jeffrey W. Elliott

cc: The Society of Conservation Biologist  
Center for Biological Diversity  
Cindy Hill esq.  
-And other concerns

